What is claimed is:

1. A detent disk for an overload coupling, in particular for a machine tool, characterized by a shape designed using powder metallurgy.

2. The detent disk as recited in Claim 1, characterized by an annular shape.

3. The detent disk as recited in Claim 1 or 2, characterized by a substantially uniform material wall thickness.

4. The detent disk as recited in one of the preceding Claims, characterized by at least one driving device (14) for driving in a rotary manner formed on an inner circumference (12).

5. The detent disk as recited in one of the preceding Claims, characterized by a durability-enhancing outer contour (17) on an outer diameter.

6. A detent disk as recited in one of the preceding Claims, characterized by detent cams (15) located on its annular surface (13) and/or recesses for accommodating rolling elements.

7. The detent disk as recited in Claim 6,
wherein
the detent cams (15) and/or recesses and the one or more driving devices (14) are arranged in an alternating pattern around the periphery.

8. An overload coupling, in particular for a machine tool, it being possible to interrupt transmission of torque from a drive unit to a tool with a detent disk (10),
wherein
the detent disk (10) has a shape designed using powder metallurgy.

9. The overload coupling as recited in Claim 8,
wherein
the detent disk (10) includes, on a front face (13) of its detent disk body, detent cams (15) and/or recesses for accommodating rolling elements that engage in a spur gear of a spur gear transmission, a toothed gearing of the spur gear and the detent cams (15) overlapping each other in the axial direction.

10. The detent disk as recited in Claim 8 or 9,
wherein
the detent disk (10) includes, on its inner diameter (12), at least one driving device (14) for establishing a rotary-driving connection with a rotary-driving means and/or a percussive-driving means (20).

11. The overload coupling as recited in one of the Claims 8 through 10,
wherein
the diameter of the detent disk (10) at its circumferential outer contour (16) – in the region beyond the detent cams (15) and/or recesses for accommodating rolling elements – is similar to that of a root circle of a spur gear toothing of the spur gear.

12. A method for manufacturing a detent disk (10) for an overload coupling, in particular for a machine tool,
wherein
the detent disk (10) is formed using a mould-based, powder metallurgical method.

13. A machine tool with an overload coupling as recited in one of the Claims 8 through 11, with a detent disk as recited in one of the Claims 1 through 7.